

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

# **NOTICE OF ACCEPTANCE (NOA)**

Poma & Sons, Inc. 2049 S.W. Poma Drive Palm City, Florida 34990

# Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

## **DESCRIPTION: "G-601" Aluminum Glazed Railing**

**APPROVAL DOCUMENT:** Drawing No. 008-0004, titled "Poma Railing System For Glass", sheets 1 through 5 of 5, prepared by Timothy C. Boudah, P.E., revision #1 dated June 14, 2012, signed and sealed by Timothy C. Boudah, P.E., bearing Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. The structural adequacy of the supporting structures is not part of this approval & shall be reviewed by the corresponding Building Dept.

This NOA revises NOA # 08-1020.11 and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY
APPROVED

NOA No. 11-1031.02 Expiration Date: 07/22/2014 Approval Date: 10/04/2012 Page 1

# Poma & Sons, Inc.

## **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

## 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-1020.11

#### A. DRAWINGS

1. Drawing No. 008-0004, titled "Poma Railing System For Glass", sheets 1 through 5 of 5, prepared by Mathers Engineering Corporation, dated June 24, 2009, signed and sealed by William J. Mathers, P.E., on June 24, 2009.

#### B. TESTS

1. Test Report No. 5627-01, by Fenestration Testing Laboratory, Inc., dated June 11, 2008, signed and sealed by Carlos Rionda, P.E.

#### C. CALCULATIONS

1. Calculation titled "Offset Post Glass Rail System", sheets 1 through 16 of 16, dated June 22, 2009, prepared by Mathers Engineering Corporation, signed and sealed by William J. Mathers, P.E., on June 22, 2009.

#### D. QUALITY ASSURANCE

1. By Miami-Dade County Building Code Compliance Office.

#### E. MATERIAL CERTIFICATIONS

1. None.

#### 2. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. 008-0004, titled "Poma Railing System For Glass", sheets 1 through 5 of 5, prepared by Timothy C. Boudah, P.E., revision #1 dated June 14, 2012, signed and sealed by Timothy C. Boudah, P.E.

#### B. TESTS

1. Test Report No. 6535, by Fenestration Testing Laboratory, Inc., dated August 12, 2011, signed and sealed by Marlin D. Brinson, P.E.

#### C. CALCULATIONS

1. Calculation titled "supplemental Structural Calculations", 27 sheets, dated September 26, 2011, prepared by Timothy C. Boudah, P.E., signed and sealed by Timothy C. Boudah, P.E..

#### D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

# E. MATERIAL CERTIFICATIONS

1. None.

Helmy A. Makar, P.E., M.S. Product Control Unit Supervisor

> NOA No. 11-1031.02 Expiration Date: 07/22/2014

Approval Date: 10/04/2012

# **GENERAL NOTES:**

#### MATERIALS:

A ALUMINUM TO BE ALLOY 6061, 6063 (TEMPER T5 OR T6) AS REQUIRED. MECHANICAL FASTENERS TO BE TYPE 304, 316 OR 410 STAINLESS STEEL UNLESS OTHERWISE NOTED.

#### ALLIMINI IM EINISHES

A. ALL ALUMINUM RAILINGS TO RECEIVE BAKED-ON PAINTED FINISH OVER FULL PRETREATMENT SYSTEM OR WHEN SPECIFIED TO BE NATURAL/MILL FINISH OR WHEN ANODIZING IS SPECIFIED.

**NOTE**: ANODIZING IS NOT RECOMMENDED FOR WELDED RAILINGS DUE TO THE LIKELIHOOD OF DISCOLORATION FROM: 1) DISSIMILAR ALLOYS, 2) DISSIMILAR TEMPERS, 3) OXIDATION, 4) WELDING FILLER METALS, 5) WELD HEAT ZONES, 6) MARRING CAUSED DURING FABRICATION AND HANDLING.

- B. PRETREATMENT PROCESS: A MULTISTAGE PRETREATMENT PROCESS IS REQUIRED PRIOR TO APPLICATION OF PAINT SYSTEM.
- THE PRODUCT SHALL BE DIPPED OR SPRAYED IN A CONCENTRATED HEATED ACIDIC CLEANER. THIS PROCESS PROVIDES CLEANING, DEGREASING AND DEEP ETCHING OF THE MATERIAL SURFACE.
- 2. THEN RINSED IN CLEAR WATER.
- THE PRODUCT SHALL THEN BE DIPPED OR SPRAYED IN A CONCENTRATED ACIDIC TREATMENT TO DEOXIDIZE, DESMUT AND NEUTRALIZE THE SURFACE.
- 4. THE PRODUCT SHALL THEN BE SPRAYED DIPPED OR SPRAYED IN A VIRGIN R.O. WATER RINSE (ELIMINATES THE POSSIBILITY OF THE ACIDIC CLEANER DRYING UP ON THE ALUMINUM SURFACE WHICH CAN BE HARMFUL TO THE PRETREATMENT PROCESS).
- 5. THE PRODUCT SHALL THEN BE DIPPED OR SPRAYED IN NON-CHROME CONVERSION COATING TO ACT AS A BOND COATING FOR PAINT ADHESION.
- 6. THE PRODUCT MUST BE COMPLETELY DRY PRIOR TO PAINTING.

ONE OF THE FOLLOWING ELECTROSTATIC SPRAY PAINTING (E.S.P.) SYSTEMS SHALL BE APPLIED:

- 1. E.S.P. APPLIED SUPERDURABLE POLYESTER THERMOSETTING RESIN OVER PRETREATMENT BOND COATING. PAINT TO BE 1.5
   3 MILS. PAINT SHALL BE BAKED ON AT 400 DEGREES FOR A MIN. DURATION OF 10 MINUTES. PAINT TO BE "TIGER DRYLAC"
  SERIES 38 SUPERDURABLE POLYESTER THERMOSETTING RESIN OR EQUAL.
  - NOTE: POWDER COATINGS AVAILABLE IN POMA CONSTRUCTION CORP. STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. "TIGER DRYLAC" SERIES 38 SYSTEM OR EQUAL MEET AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
- 2. E.S.P. APPLIED HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISH. ALUMINUM RAILINGS SHALL BE CLEANED WITH INHIBITED CHEMICALS AND THE SURFACE SHALL BE CHEMICALLY CONVERTED TO AMORPHOUS CHROMIUM PHOSPHATE TO CONFORM WITH ASTM D 1730. TYPE B, METHOD 5, PRIOR TO COATING. APPLY MANUFACTURERS 2-COAT THERMOCURED SYSTEM COMPOSED OF SPECIALLY FORMULATED INHIBITED PRIMER AND FLUOROPOLYMER COLOR COAT WITH COLOR COAT CONTAINING NOT LESS THAN 70% POLYVINYLIPENE FLUORIDE RESIN BY WEIGHT. PAINT TO HAVE 1.0 -1.2 MILS DRY FILM THICKNESS. PAINT SHALL BE BAKED ON AT 475 DEGREES FOR A DURATION OF 10 MINUTES. SUBSTRATE TEMPERATURE SHALL REACH 450 DEGREES FOR A DURATION OF 5 MINUTES. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM OR EQUAL MEET AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
  - NOTE: HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISHES ARE AVAILABLE IN POMA CONSTRUCTION CORP.

    STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE
    PVDF SYSTEM OR EQUAL WHICH MEET AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
- 3. E.S.P. APPLIED HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISH WITH XL COATING. ALUMINUM RAILINGS SHALL BE CLEANED WITH INHIBITED CHEMICALS AND THE SURFACE SHALL BE CHEMICALLY CONVERTED TO AMORPHOUS CHROMIUM PHOSPHATE TO CONFORM WITH ASTM D 1730. TYPE B, METHOD 5, PRIOR TO COATING. APPLY MANUFACTURERS STANDARD 3-COAT THERMOCURED SYSTEM COMPOSED OF SPECIALLY FORMULATED INHIBITED PRIMER, FLUOROPOLYMER COLOR COAT AND FLUOROPOLYMER TOP COAT WITH COLOR COAT AND TOP COAT CONTAINING NOT LESS THAN 70% POLYVINYLIDENE FLUORIDE RESIN BY WEIGHT. PAINT TO HAVE 1.6 -1.8 MILS DRY FILM THICKNESS. PAINT SHALL BE BAKED ON AT 475 DEGREES FOR A DURATION OF 10 MINUTES. SUBSTRATE TEMPERATURE SHALL REACH 450 DEGREES FOR A DURATION OF 5 MINUTES. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM OR EQUAL MEET AAMA 2605 SPECIFICATIONS AND HAVE A 10 YEAR DURABILITY RATING.
  - NOTE: HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISHES ARE AVAILABLE IN POMA CONSTRUCTION CORP.

    STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. PAINT TO BE "PPG'S" DURANAR HIGH

    PERFORMANCE PVDF SYSTEM WITH XL COATING OR EQUAL WHICH MEET AAMA 2605 SPECIFICATIONS AND HAVE A

    10 YEAR DURABILITY RATING.

ADDITIONAL NOTES: UPON REQUEST FIVE, TEN AND (IN CERTAIN GEOGRAPHICAL LOCATIONS) 15 YEAR WARRANTIES ARE OBTAINABLE AT ADDITIONAL COSTS. ADDITIONALLY, CUSTOM COLORS ARE OBTAINABLE AT ADDITIONAL COSTS.

#### CONSTRUCTION

ASSEMBLY SHALL BE DONE IN ACCORDANCE WITH POMA CONSTRUCTION CORP. STANDARDS WITH THE DETAILS SPECIFICALLY AS SHOWN AND NOTED ON THESE DRAWINGS. SHOP CONNECTIONS SHALL BE DONE IN A NEAT, WORKMANLIKE MANNER UTILIZING THE MIG AND/OR TIG WELDING PROCESSES CONSISTING OF 4043 & 5356 WELD FILLER ALLOYS RESPECTIVELY. HORIZONTAL CHANNELS SHALL BE PUNCHED TO RECEIVE PICKETS AND ALL WELDS IN THIS APPLICATION SHALL BE CONCEALED FROM NORMAL VIEW. EXPOSED WELDS WILL BE GROUND ONLY AS NOTED ON THESE DRAWINGS. ANY WELDS NOT SPECIFICALLY SHOWN OR NOTED WILL BE SIZED AND LOCATED BY POMA CONSTRUCTION CORP. TO ENSURE PROPER FABRICATION. ALL POSTS SHALL BE FIRMLY ATTACHED TO THE HORIZONTAL MEMBERS TO ASSURE FIXED FASTENING FOR THE LIFE OF THE RAILING SYSTEM. CORNERS SHALL BE HAIRLINE FITTED AND WELDED TO INSURE MAXIMUM STRENGTH DURING USAGE AND NORMAL BUILDING EXPANSION AND CONTRACTION. THESE WELDS WILL BE GROUND SMOOTH IF EXPOSED.

#### **DELIVERY:**

DELIVER AND STORE RAILINGS IN A DRY AND SAFE LOCATION PROVIDED BY THE GENERAL CONTRACTOR OR OWNER. HANDLE WITH EXTREME CARE TO AVOID MARRING THE FINISHED PRODUCT.

#### INSTALLATION:

BALCONY RAILINGS SHOULD BE INSTALLED FROM THE TOP FLOOR DOWN AND ONLY WHEN ALL PAINTING AND MASONRY WORK IS COMPLETED. SET EACH RAILING POST IN CORE/HAMMER DRILLED, SLEEVED OR BLOCKED OUT HOLES AND SECURED WITH A NON SHRINK, NON METALLIC, STRUCTURAL GROUT OR BY AN ALTERNATE METHOD AS NOTED ON THIS DRAWING, OR BY POMA CONSTRUCTION CORP.'S STAINLESS STEEL ANCHOR PIN INSERT WHICH WILL BE INSTALLED BY MEANS OF HAMMER DRILLING OR CORE DRILLING A 3" DIAMETER HOLE, NOT LESS THAN 4" DEEP. CLEAN HOLE OF ANY LOOSE MATERIAL, PLACE ALUMINUM HANDRAIL WITH STAINLESS STEEL ANCHOR PIN INSERT IN HOLE AND FILL SPACE WITH HIGH STRENGTH EPOXY AND SAND FILLER, MIXED AND PLACED TO COMPLY WITH ANCHORING MATERIAL MANUFACTURER'S DIRECTIONS.

**NOTE:** THIS IS THE RECOMMENDED METHOD OF INSTALLATION OF RAILING SYSTEMS FOR ANY HIGH RISE STRUCTURE, AND MORE IMPORTANTLY, ALL STRUCTURES LOCATED NEAR OR WITHIN A CORROSIVE ENVIRONMENT.

FIELD SPLICE LOCATIONS SHALL BE DETERMINED BY POMA CONSTRUCTION CORP. TO BEST ACCOMMODATE FABRICATION, PAINTING, SHIPPING AND INSTALLATION. FIELD SPLICES SHALL BE ACCOMPLISHED BY BUTTING THE TOP CAP OF ONE SECTION TO ANOTHER, USING AN INTERIOR SLEEVE INSERT OR CONCEALED TAB CONNECTION AND FURTHER SECURED BY MEANS OF STAINLESS STEEL FASTENERS, OR NON FERROUS, SELF EXPANDING RIVETS. IT SHOULD BE NOTED THAT, ALTHOUGH ALL FIELD SPLICES WILL BE DONE IN A WORKMAN LIKE MANNER, THESE JOINTS WILL BE VISIBLE UPON COMPLETION AND WILL REQUIRE A MIN. GAP OF 1/2" PER TWENTY FOOT SECTION OF TOP OR BOTTOM RAIL, TO ALLOW FOR EXPANSION AND CONTRACTION OF RAILINGS AND/OR STRUCTURE.

NOTE: GENERAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING BACKING IF AND WHERE NECESSARY FOR INSTALLATION OF RAILINGS TO BUILDING SUBSTRATE.

#### CLEANING AND PROTECTION:

A. ON DELIVERY ALL RAILING WILL HAVE A PROTECTIVE COVERING OVER THE TOP HANDRAIL CAP ONLY. IMMEDIATELY UPON COMPLETION OF INSTALLATION OF RAILING, INSTALLER SHALL REMOVE PROTECTIVE COVER AND CLEAN ALL WORK FOR INSPECTION AND APPROVAL.

- B. AFTER INSTALLATION GENERAL CONTRACTOR OR OWNER SHALL BE RESPONSIBLE FOR PROTECTING RAILINGS DURING BALANCE
- C. PAINTED ALUMINUM SURFACES SHALL BE CLEANED WITH PLAIN WATER CONTAINING A MILD SOAP OR DETERGENT. NO ABRASIVE AGENTS OR HARSH CHEMICALS ARE TO BE USED. (NOTE: ALL RAILINGS REQUIRE PERIODIC MAINTENANCE ESPECIALLY THOSE SUBJECT TO OCEAN SALT AIR OR HARMFUL CHEMICAL ENVIRONMENTS (WITHIN ½ MILE), WHICH REQUIRE WASHING A MINIMUM OF ONCE EVERY (6) MONTHS. APPLICATION OF AN APPROVED UV PROTECTANT AFTER WASHING IS RECOMMENDED.

#### OVERNING CODE:

ALL RAILINGS SHOWN IN THIS PRODUCT APPROVAL DOCUMENT ARE SHOP FABRICATED AND ASSEMBLED TO WITHSTAND LOADS AS REQUIRED IN THE APPLICABLE BUILDING CODES AS THEY PERTAIN TO VARIOUS RAILING AND GUARDRAIL LOADING CONDITIONS. SPECIFICALLY LIVE LOADS CONSISTING OF 200 POUNDS APPLIED TO THE TOP RAIL AT ANY LOCATION AND IN ANY DIRECTION OR 50 POUNDS PER LINEAL FOOT UNIFORM LOAD.

IT HAS BEEN ASSUMED THAT THE STRUCTURE HAS BEEN DESIGNED AND CONSTRUCTED TO SAFELY SUPPORT THE LOADS IMPOSED BY THE RAILINGS.

#### APPLICABLE BUILDING CODES:

1. FLORIDA BUILDING CODE-BUILDING, 2007, AS AMENDED THROUGH OCTOBER 2009, WITH LAMINATED GLAZING REQUIRED BY FBC-BUILDING, SECTION 1618.4.6.3 (2010 EDITION, EFFECTIVE MARCH 15, 2012).

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No ||- |03|.07
Expiration Date 07/22/2014

Miami Dade Product Control

MAXIMUM (ALLOWABLE)
DESIGN PRESSURE = (+100 PSF,-100 PSF).

NOTE: MAXIMUM ALLOWABLE DESIGN PRESSURE DETERMINED FROM THE LOWEST TESTED PRESSURE. CALCULATED PRESSURES ARE HIGHER THAN TESTED PRESSURE OF 100 PSF

Date Oblist 2012
Timothy C. Boudah, P.E.

revisions

date by description

date by description

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adalog REPLACE 13

adalog REPLACE 13

D CLAZING WITH FBC 2010 L/ 1/8" & S.S. FIN WITH 1/8" & S. RUSICN; AND UPDATED E.S.

STRUCTURAL DESIGN SERVICE 1499 S.E. PORT ST. LUCE BLYD., PORT ST. LUCE, FL. 34952 PHONE: (772)398-0342 FAX: (772)398-0342

POMA & SONS, INC. 2049 S.W. POMA DRIVE PALM CITY, FL. 34990 OFFICE: (772) 283-0099 FAX: (772) 283-7540

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BOUDAH,

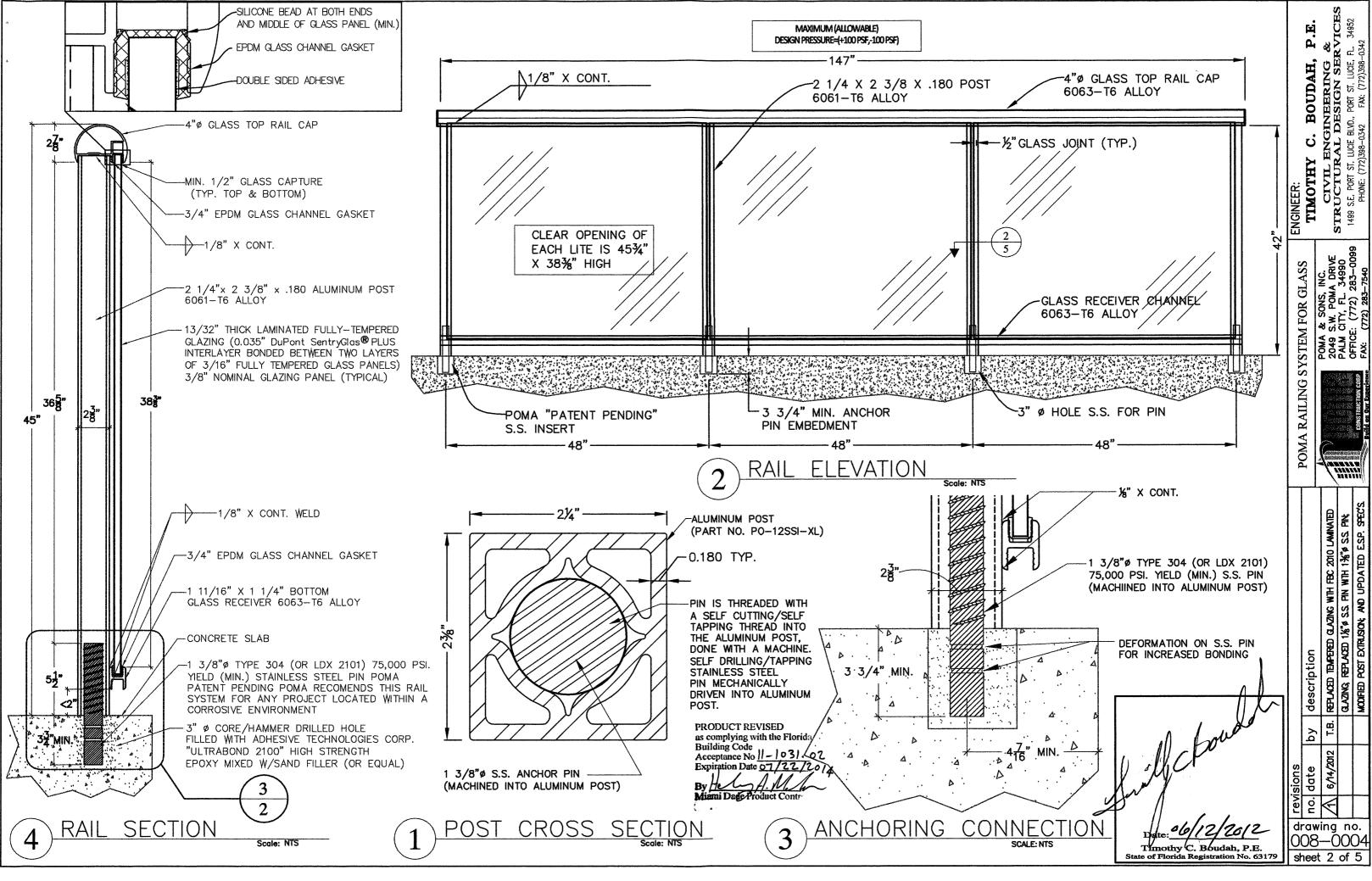
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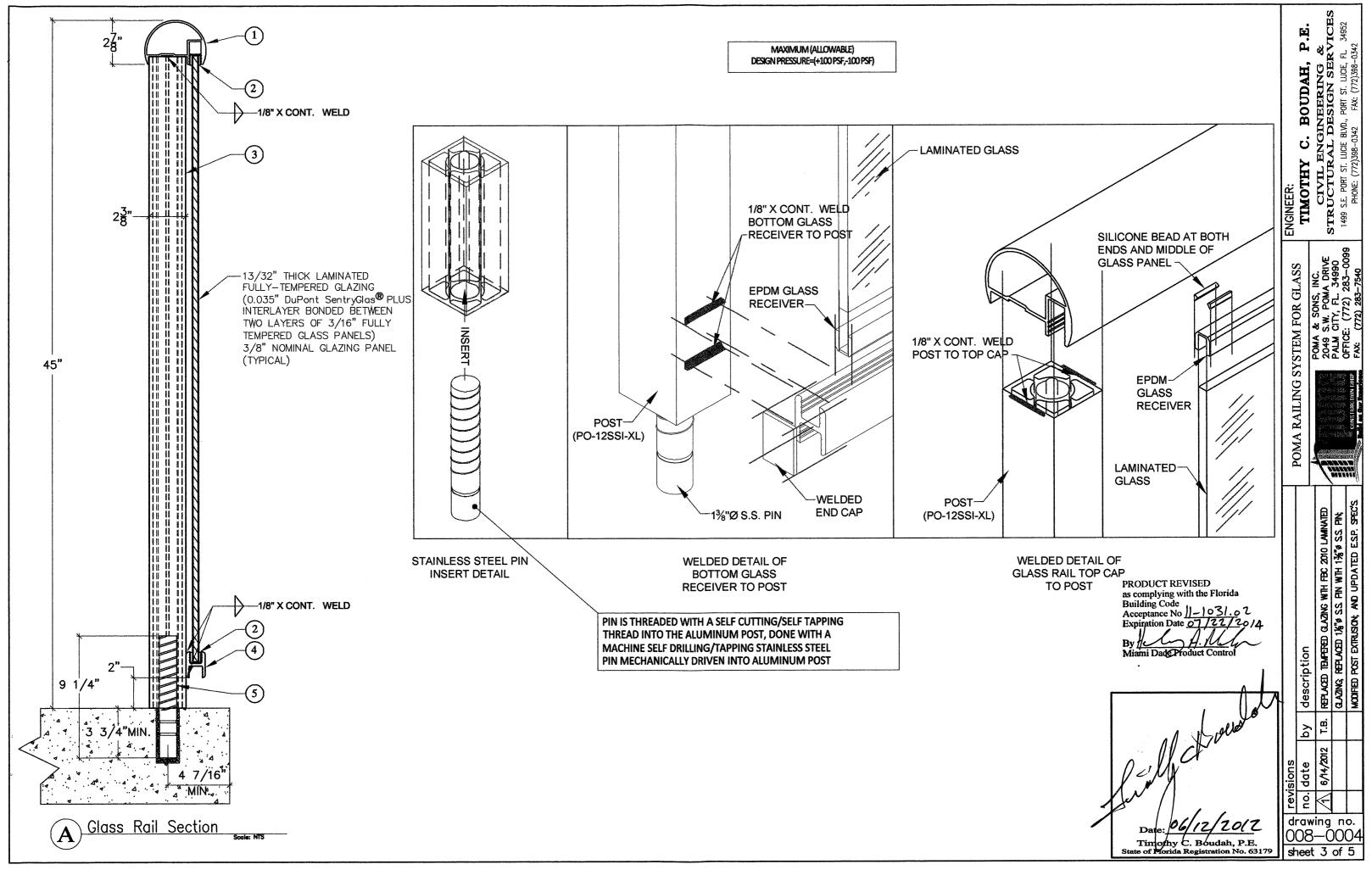
ENGINEER: TIMOTHY

GLASS

SYSTEM FOR

POMA RAILING



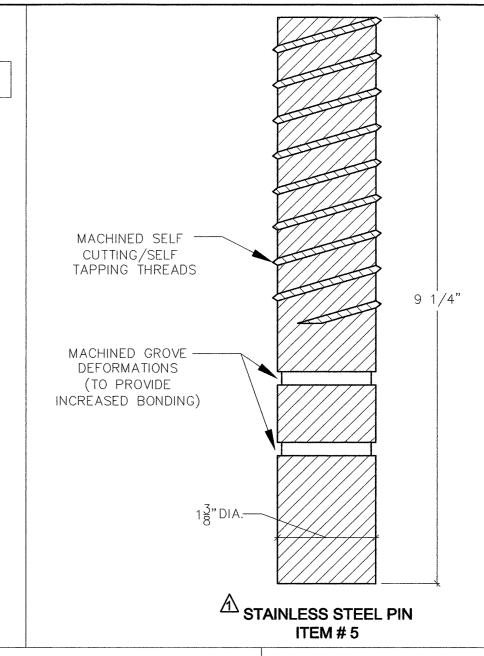


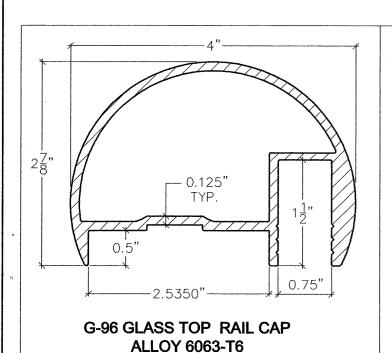
# NOTES:

- 1. THIS RAILING IS DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (F.B.C.), 2007, AS AMENDED THROUGH OCTOBER 2009, WITH LAMINATED GLAZING DESIGNED AND TESTED IN CONFORMANCE TO 2010 F.B.C. BUILDING, SECTION 1618.4.6.3.
- 2. ALL EXTRUSIONS ARE ALUMINUM, 6061-T6 (POST), 6063-T6 ALLOY, U.O.N. WITH A MINIMUM YIELD STRENGTH, Fy = 35,000 PSI.
- 3. ALL HARDWARE AND FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.

ITEM NUMBER	PART NUMBER	PART NAME
1	G - 96	GLASS TOP RAIL CAP
2	3/4" EPDM	GLASS CHANNEL GASKET
3	PO - 12SSI-XL	ALUMINUM POST (EXTRUDED FOR 1 3/8"Ø S.S. PIN)
4	G - 54	GLASS RECEIVER CHANNEL
5	S.S. PIN	1 3/8" Ø STAINLESS STEEL PIN INSERT

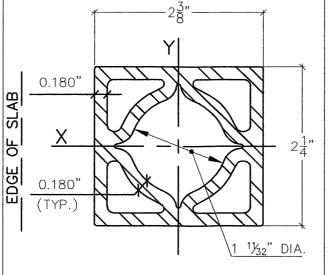
MAXIMUM (ALLOWABLE)
DESIGN PRESSURE=(+100 PSF,-100 PSF)



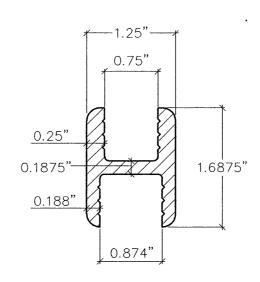


ITEM#1





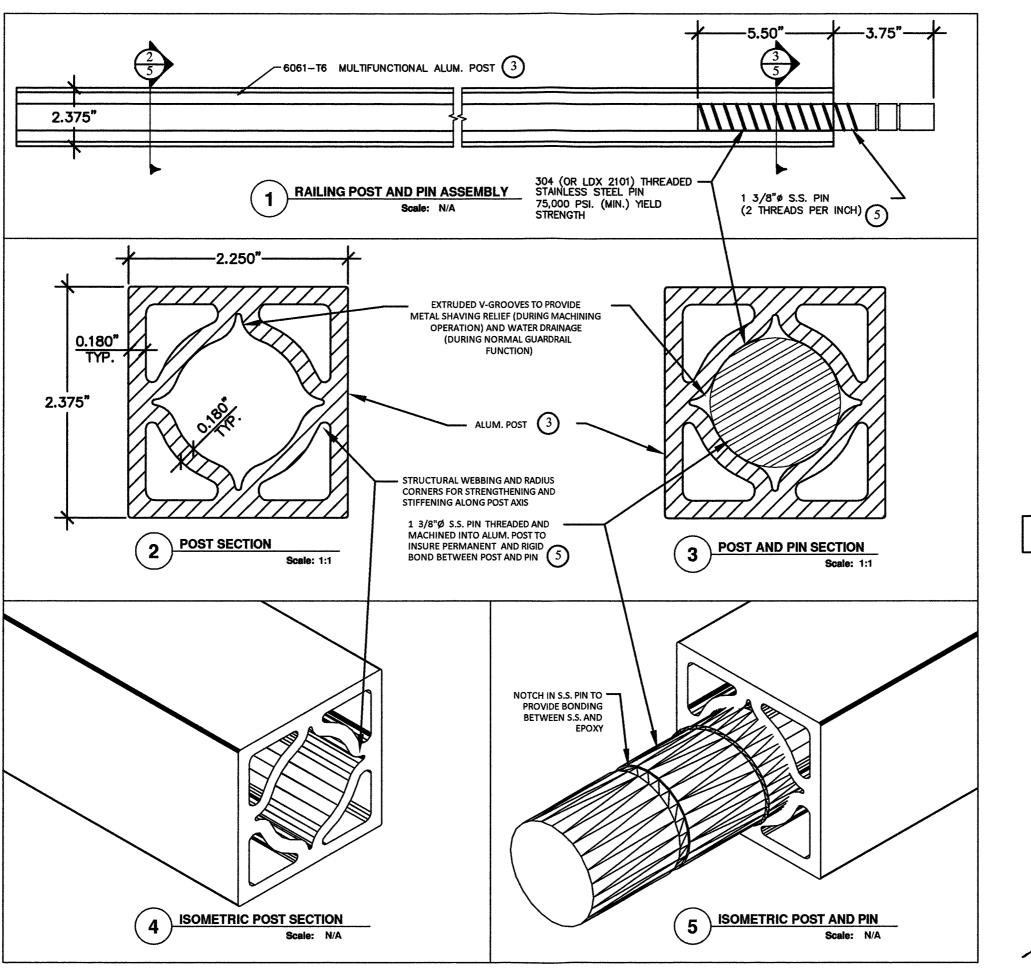
PO-12SSI-XL ALUMINUM POST ALLOY 6061-T6 ITEM # 3



G-54 GLASS RECEIVER CHANNEL ALLOY 6063-T6 ITEM # 4 PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 11-1031.02
Expiration Date 07/22/2014
By Lead Miami Dado Product Control

Date: 06/12/20/2
Timothy C. Boudah, P.E.
State of Florida Registration No. 63179

POMA RAILING SYSTEM FOR GLASS sheet 4 of 5



MAXIMUM (ALLOWABLE) DESIGN PRESSURE= (+100 PSF,-100 PSF)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No //- 03/. 02
Expiration Date 07/22/20/4

description

Timothy C. Boudah, P.E. State of Florida Registration No. 63179

6/14/2012 date drawing no. 008-0004 sheet 5 of 5

REPLACED TEMPERED GLAZING WITH FBC 2010 LAWINATED GLAZING; REPLACED 1/6/9 SS. PIN VITH 176/9 SS. PIN; MIDIFIED POST EXTRUSITN; AND UPDATED ESP. SPEC'S

ENGINEER! TIMOTHY

POMA RAILING SYSTEM FOR GLASS